

### REMARKS

The limitation “wherein the plurality of cross-linked nanoparticle aggregates affixed within the second channel are substantially throughout a cross sectional area of the second channel” of new claim 34 is fully supported by Figure 1 of the specification.

In footnote 1 on page 5 of the Action, the Examiner states that in paragraph 0052, U.S. Pub. No. 2005/0003376 “teaches that the nanoparticle aggregates may be deposited or immobilized onto the surface.” Paragraph 0052 of U.S. Pub. No. 2005/0003376 states:

The plurality of aggregates may be a colloidal suspension of aggregates dispersed in a medium such as water, an organic solvent or a gel. Colloidal suspensions are typically prepared by chemically reducing metal salts with reductants such as sodium borohydride and sodium citrate in aqueous or organic solutions. Colloidal suspensions can also be prepared by laser ablation of a solid metal. The plurality of aggregates may comprise clusters of particles deposited on a surface, and the clusters are referred to as "island films" in this embodiment. Metal clusters may be deposited on an electrode or on a substrate such as glass or quartz. The aggregates may be lithography-produced aggregates.

Nowhere does the above paragraph disclose the limitation “a plurality of cross-linked nanoparticle aggregates affixed within the second channel” of claim 26 or the limitation “wherein the plurality of cross-linked nanoparticle aggregates affixed within the second channel are substantially throughout a cross sectional area of the second channel” of new claim 34. Where is any “channel” disclosed in paragraph 0052 of U.S. Pub. No. 2005/0003376 or throughout the description of U.S. Pub. No. 2005/0003376? **Nowhere!** Applicants respectfully submit that this fact will become self-evident to the Examiner after reading the rest of the Remarks.

Claim 26 has been amended for clarity but not to overcome any prior art rejection.

The former attorney of Applicants filed a terminal disclaimer in which the serial number of the application stated is Serial No. 10/108,128, which is not correct, as the provisional double

patenting rejection was over claims 24, 25, 27-30 of Serial No. 10/099,287. This terminal disclaimer should therefore have no impact on the patent issuing from the pending application.

Claims 26, 27, 29-30 were provisionally rejected for obviousness-type double patenting over claims 24, 25, 27-30 of copending application Serial No. 10/099,287. Claims 26, 27, 29-30 were provisionally rejected for obviousness-type double patenting over claims 26-30 of copending application Serial No. 11/270211. These rejections are respectfully traversed.

As these rejections are *provisional*, Applicants are not required under the law to respond to these rejections.

Claims 26-33 were rejected as being anticipated by Kneipp. This rejection is respectfully traversed.

The Examiner has relied on paragraphs 0047-0049, 0052, 0056 and claims 173-179 of U.S. Pub. No. 2005/0003376 (hereinafter "Kneipp III") to reject apparatus claims 26-33. A careful reading of Kneipp III shows that claims 173-179 are nowhere supported in the specification of Kneipp III. Therefore, the effective filing date of claims 173-179 of Kneipp III is the filing date of Kneipp III, which is November 26, 2003. Therefore, the reliance on the disclosure of claims 173-179 of Kneipp III to reject claims 26-33 is incorrect.

For the benefit of the Examiner, Applicants have carefully researched the file history of Kneipp III. Kneipp III, filed on November 26, 2003, is a continuation of Serial No. 10/054,727, filed January 22, 2002, now abandoned (hereinafter "Kneipp II"), which is a continuation of Serial No. 09/063,741, filed on April 21, 1998, now abandoned (hereinafter "Kneipp I").

On the other hand, the pending application is a continuation-in-part of Serial No. 10/108,128, filed March 26, 2002, and published on October 2, 2003 as U.S. Pub. 2003/0187237. Original claim 26 of the pending application was recited in substantially identical form as claim 20 of the '128 application (see Exhibit 1). In fact, it appears that the patentee of Kneipp III drafted

claims 173-179 and filed Kneipp III on November 26, 2003 simply to create artificial prior art against the pending application when none really exists.

First, please refer to the claims of Kneipp II in Exhibit II. Please note that there are no claims directed to an apparatus, much less the apparatus of claim 172 of Kneipp III, which reads:

173. An apparatus comprising: a) a reaction site for immobilizing a DNA fragment onto an aggregate; b) a first channel carrying a liquid stream, the first channel in fluid communication with said reaction site; c) a second channel carrying the liquid stream, the second channel in fluid communication with said first channel; d) a multiplicity of nanoparticles in said second channel; and e) a Raman detector operably coupled to said second channel.

Now compare claim 173 of Kneipp III with claim 20 of the '128 application (see table below) and it becomes evident that the intention of the patentee of Kneipp III was to substantially copy claim 20 of the '128 application.

<b>Claim 20 of the '128 application</b>	<b>Claim 173 of Kneipp III</b>
20. An apparatus comprising:	173. An apparatus comprising:
a) a reaction chamber;	a) a reaction site for immobilizing a DNA fragment onto an aggregate;
b) a first channel in fluid communication with said reaction chamber;	b) a first channel carrying a liquid stream, the first channel in fluid communication with said reaction site;
c) a second channel in fluid communication with said first channel;	c) a second channel carrying the liquid stream, the second channel in fluid communication with said first channel;
d) a multiplicity of nanoparticles in said second	d) a multiplicity of nanoparticles in said

channel; and	second channel; and
e) a Raman detector operably coupled to said second channel.	e) a Raman detector operably coupled to said second channel.

Also, Applicants respectfully submit to the Examiner to do a quick computerized search of Kneipp II using the following terms of claim 173: “reaction site,” “channel,” “first channel” and “second channel” and the Examiner will find that none of these terms are disclosed anywhere in Kneipp II.

After filing the application of Kneipp III, the patentee of Kneipp III filed a Preliminary Amendment on September 29, 2004 (Exhibit III). In this Preliminary Amendment, the patentee of Kneipp III replaced all prior versions, and listing, of claims with the claims shown in Exhibit III. On June 1, 2005, the Examiner of Kneipp III issued a Restriction Requirement (Exhibit IV) restricting the claims into multiple groups. Next, the patentee of Kneipp III filed as second Preliminary Amendment (Exhibit V) on August 25, 2005, *canceling apparatus claims 173-178*. Please see Exhibit V. In short, apparatus claims 173-178, which are not supported or enabled by the disclosure of Kneipp I, have also not been tested by the USPTO for appropriate support and enablement in the disclosure of Kneipp I.

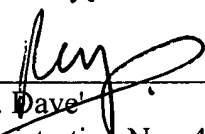
Applicants respectfully submit that claims 173-178 of Kneipp III were intentionally added and later canceled in Kneipp III to create artificial prior art against the apparatus claims of the pending application.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket referencing docket no. 070702007620.

Dated: July 21, 2006

Respectfully submitted,

By   
Raj S. Dave

Registration No.: 42,465  
MORRISON & FOERSTER LLP  
1650 Tysons Blvd, Suite 300  
McLean, Virginia 22102  
(703) 760-7755